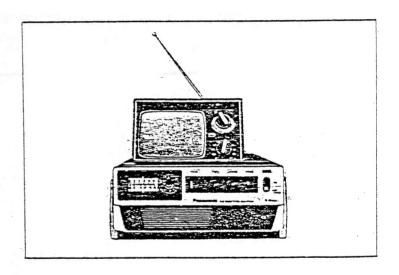
Black and White Television

TR-535/T

Chassis No.T506-A Main Manual



Specifications

Power Source: Power Consumption:

Antenna:

AC: 120V 60Hz AC: 20W

DC: 12V

UHF/VHF Monopole antenna 75 Ohm Unbalanced type.

VHF and UHF External antenna

300 Ohm Balanced type

Receiving Channels: TV

VHF 2ch-13ch USA Standard UHF 14ch-83ch - USA Standard

45.75 MHz

FM 88~106 MHz Radio AM530~1650 MHz

Intermediate

Frequency:

Stages:

Transistors: Diodes:

High Voltage:

Video: Sound:

25

41.25 MHz 1-F: 3 Video: Sound: I-F: 1(IC)

21 7.2 kV (Brightness & Contrast are MIN)

IC:

Picture Tube:

Audio Output:

Speaker: Automatic Controls: Type 140AKB4

13 square inches 55° Deflection. 3-1/2" Round type Max. 360mW

Keyed AGC (Automatic Gain Control)

Saw-Tooth AFC

(Automatic Frequency Control) AVR (Automatic Voltage Regulator) ACP (Automatic Charge Protector)

ADP (Automatic Discharge

Protector)

Dimensions:

Weight:

Height: 5-1/2 inches Weidth: 12-1/2 inches

Depth: 14 inches

15-1/5 lbs

With Panalloid Batteries

anasonica

Matsushita Electric Corp. of America 50 Meadowland Parkway Secaucus. New Jersey 07094

Matsushita Electric of Hawaii, Inc. 320 Waiakamilo Road, Honolulu, Hawaii 96817

Matsushita Electric of Canada Ltd. 40 Ronson Drive, Rexdale, Ont.

ORDER NO. 7505-007

-CAUTION-

The high voltage supply at the picture tube anode will give an unpleasant shock, but does not supply enough current to give a fatal burn or shock. However, sencodary human reaction to otherwise harmless shocks have been known to cause injury. Always discharge the picture tube anode to the receiver chassis before handling the tube.

Certain portions of the high voltage generating circuit are dangerous and extreme caution should be observed. The picture tube is highly evacuated and, if broken, glass fragments will be violently expelled.

WHEN HANDLING THE PICTURE TUBE, ALWAYS WEAR GOGGLES AND PROTECTIVE CLOTHING.

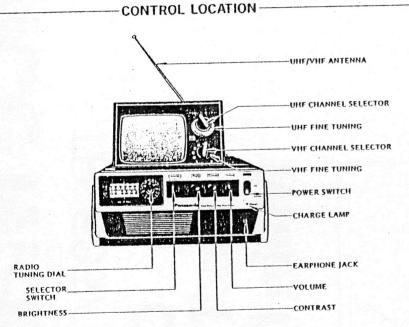
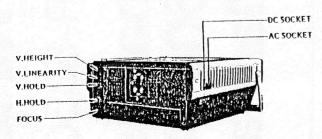


Fig. 1



ADJUSTMENTS

VERTICAL HEIGHT AND VERTICAL LINEARITY (Fig. 2)

(1) These controls (VR32 and VR33) should be adjusted at the same time to give proper vertical size consistent good vertical linearity. The adjustment should be made to extend the picture limits approximately 3/16" (5 beyond the top and bottom edges of the mask.

AGC (AUTOMATIC GAIN CONTROL)

The adjustment of the AGC control effectively changes the operating point of the AGC amplifier. Turn the acountrol fully clockwise to set for maximum gain. In some areas this may cause clipping of the sync pulses, resulting wiggle in the picture and unstable sync. Turning the AGC control in a counterclockwise direction will decrease the of the receiver and diminish the wiggle.

TO ADJUST THE AGC PROPERLY (Fig. 3)

- (1) Set the channel selector to a station transmitting a strong signal.
- (2) Set the R-F AGC control VR 19 to the center position.
- (3) Turn the I-F AGC control VR 18 fully counterclockwise, and the contrast and brightness controls fully clocks
- (4) Adjust the 1-F AGC control VR 18 to obtain a sharp and clear picture. If 1-F AGC control VR 18 is turned (clockwise, the input signal strength will be maximum.
- (5) Observing the input signal, turn the R-F AGC control VR 19 clockwise or counterclockwise to the point where snow noise disappears in the picture.
- (6) Check the reception on all channels. There should be no wiggling. Make certain the picture does not disap when the contrast control is turned to minumum.
- (7) Readjust AGC control slightly, if necessary. In very strong signal areas, where slight sync clipping is still evid shorten antenna length or use a pad with an outside antenna to reduce signal input.

YOKE POSITION (Fig. 5)

The yoke is secured to the neck of the picture tube with an angular clamp and screw. To adjust the yoke and cor for picture tilt, loosen this clamp. Correct tilt and retighten the screw.

CENTERING (Fig. 5)

The picture centering device consists of two rings located at the rear of the yoke assembly. Each ring has a tab for of adjustment. The tabs should be rotated and moved towards or away from each other until the picture is prop centered on the screen of the picture tube.

FOCUS (Fig. 2)

Adjust the focus control (VR64) for the sharpest and clearest picture,

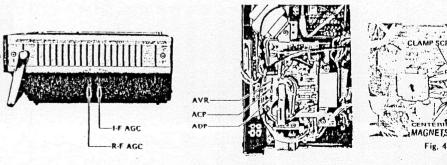


Fig. 3

Fig. 4

Fig. 5

-DISASSEMBLY INSTRUCTIONS

Upper Cabinet Removal 1. Remove 5 mounting screws (A) shown in Fig. 6 and Fig. 7.

POP-UP Block Removal

- 1. Remove the upper cabinet.
- 2. Remove 4 screws (B) shown in Fig.8.
- 3. Picture Tube: Remove 4 screws Oshown in Fig.9.
- 4. Tuner Block: Remove 3 screws (D shown in Fig. 9.

Radio Block Removal

- Remove the upper cabinet, 3 connectors and the picture tube Barrler as shown in Fig.10.
- 2. Pull off the selector switch knob and the radio tuning dial.
- 3. Remove 2 screws Eshown in Fig.12.

Volume Block Removal

- 1. Remove the upper cabinet and the radio block.
- 2. Remove 2 screws Shown in Fig.11.

Speaker and Power switch Removal

- 1. Remove the upper cabinet and the volume block,
- 2. Remove 2 screws (G) shown in Fig. 12.

Main Circuit Board Removal

- 1. Remove the upper cabinet.
- 2. Pull off the V.Hold knob and H.Hold knob.
- 3. Remove a screw(A) shown in Fig.11.
- 4. Pull the main circuit board upward.

Power Circuit Board Removal

- 1. Remove the upper cabinet and the PUP-UP block.
- 2. Remove a screws (1) and 4 screws (1) shown in Fig. 13 and Fig. 11

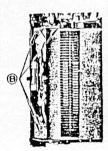


Fig. 8

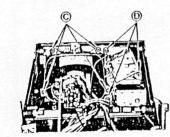
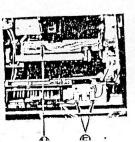
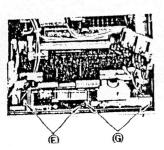


Fig. 9





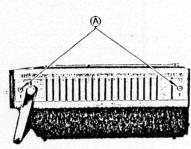
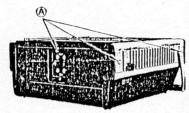
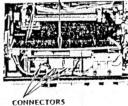


Fig. 6



Fie 7



PICTURE TUBE

Fig. 10

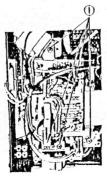
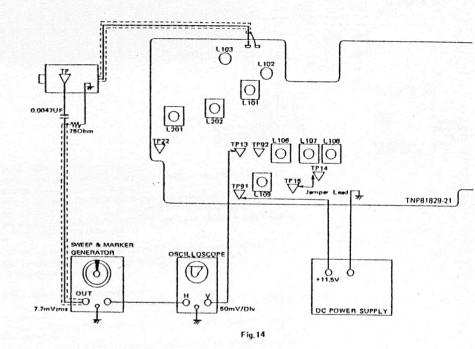


Fig. 13

VIDEO I-F ALIGNMENT

PREPARATION

- 1. Sweep & marker generator, oscilloscope and DC power supply Connect and set as shown in Fig. 1
- 2. Connect the jamper lead between TP14 and TP15 as shown in Fig. 14

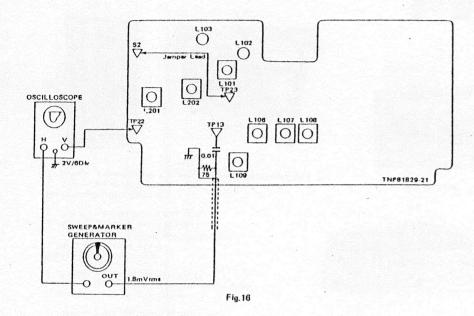


ALIGNMENT PROCEDURE

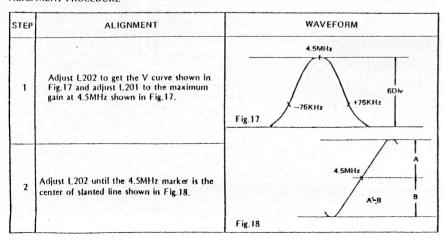
STEP	ALIGNMENT	WAVEFORM
1	Adjust L103 for the 41.25MHz marker position to fall shown in Fig.15.	39.75MHz 1.50W 47.25MHz
2	Adjust L102 for the 47.25MHz marker position to fall shown in Fig.15.	5.4Div 45.75MHz
3	Adjust both L101 and tuner convertor coil to obtain the correct responce carve—shown—in Fig.15.	43.00MHz
		Fig.15

PREPARATION

- 1. Set the power switch to "ON" position.
- 2. Turn the volume fully counterclockwise.
- 3. Sweep & Marker generator and osilloscoe... connect and set shown in Fig. 16.
- 4. Connect the jamper lead between S2 and TP23 as shown in Fig. 16.



ALIGNMENT PROCEDURE



CONNECTIONS

Connect as shown in Fig. 19

PREPARATION

- 1. Turn the VR71 fully counterclockwise.
- 2. Turn the VR72 and VR73 fully clockwise,

A. ACP circuit alignment procedure

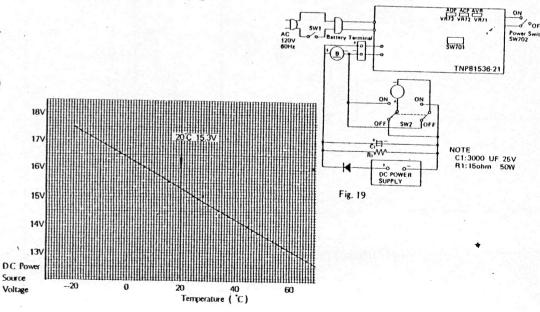
- 1. Set the SW-1 and the SW-2 to ON position, and set the SW701 and the SW702 to OFF position.
- 2. Adjust the DC power supply voltage indicating V1 meter to the value which it indicates Fig. 20 (Be sure to check the temperature. The voltage is changed by the temperature.)
- 3. Turn the VR72 colckwise and set the point where the charge lamp has started iluminating
- 4. Confirm the operating voltage of ADP circuit shown in Fig.20 by rising the DC power supply voltage and droping it.

B. AVR adjustment procedure

- 1. Set the SW-1 to ON position and the SW-2 to OFF position.
- 2. Set the V1 voltage to 11.5V by adjusting the AVR control VR71.

C. ADP circuit adjustment procedure

- 1. Set the SW-1 to OFF and set the SW-2, SW-3 and SW702 to ON position.
- 2. Set the VI voltage to 11.0V by adjusting the DC power supply.
- 3.Set the point where the A1 ammeter has started swinging to zero by turning the VR72 counterclockwise.
- 4. Confirm the operating voltage (11.0V) of ADP circuit by rising the DC power supply voltage and droping it.



NEW CIRCUIT EXPLANATION

VIDEO I-F AMPLIFIER & AGC CIRCUIT (IC11 #PC595C)

The tuner output is coupled through input filter to terminal pin No.1 of IC 11. In the IC, the output from the input filter is amplified through the first amplifier stage and is then coupled to the gain control circuit, the output of which is further amplified and supplied to the succeeding stage filter.

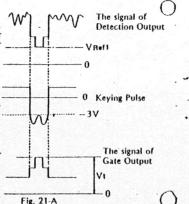
Meanwhile, control signal from the I-F AGC amplifier is coupled to the gain control circuit: this control signal controls the gain of the video amplifier to stabilize the video amplifier output, that is, detection output,

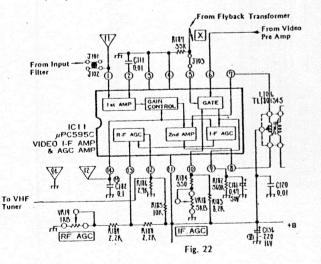
The output of the I-F AGC amplifier is also coupled to the R-F AGC amplifier for comparison with a reference voltage VREF2 applied to IC terminal pin No. 13. The R-F AGC amplifier has a delayed AGC function and supplies AGC bias from terminal pin No. 12 of IC to the VHF tuner.

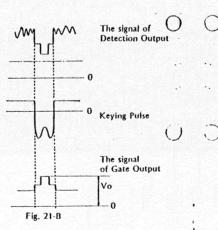
The gate circuit operates as keyed AGC. The detection output is coupled to IC terminal pin No.6, reference voltage VREF1 to terminal pin No.10, and keying pulse signal to terminal pin No.5, these signals being related as shown in Fig. 21. The output of the gate circuit is provided only during the presence of a keying pulse, and its level according to the level of the detection output, as shown in Figs. 21-A and B, the level is reduced with decreasing detection output.

The gate circuit output is rectified through diode within the IC and filter connected to IC pin No.9, and the rectified output Is applied to the I-F AGC amplifier. The amplified voltage output from the I-F AGC amplifier is applied to the gain control circuit for controlling the gain of the I-F amplifier.

Since the I-F signal from the input filter is amplified before it is coupled to the gain control, application of AGC voltage will not result in variation of the picture



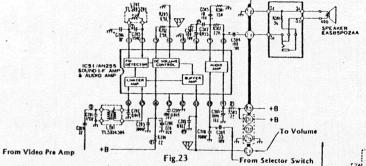




SOUND DETECTOR & AUDIO AMPLIFIER CIRCUIT (IC 51 AN255)

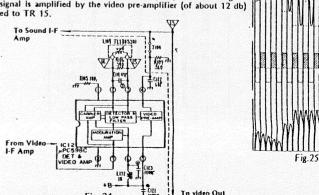
- The sound I-F signal from C200 is coupled through the input filter consisting of L201 and C201 to terminal pins No.15 and No.16 of IC 51.
- The coupled signal is amplitude-limited by the limiter amplifier to a constant amplitude, and then it is fed to the FM detector and resonant circuit consisting of C205, L202 and C206.
- The output of the resonant circuit, phase shifted from its input, is coupled to the FM detector.
- In the FM detector the difference between its two inputs is taken to produce low-frequency output,
- The low-frequency detected signal is led to the D-C volume control circuit.
- Here, the detected output is reduced to the same level as the radio output through R202 and R203 (the detected output level being increased by reducing the voltage on terminal pin No.4 of IC 51).

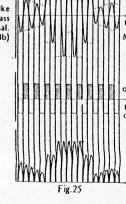
- The detected output having been reduced to the same level as radio output through the D-C volume control circuit is applied to the buffer amplifier, the output of which is coupled to IC terminal pin No.11 for quality adjustment through C208 cutting off high frequency components.
- The resultant output is coupled to VR51 for volume control before being coupled to the audio amplifier.
- The audio amplifier is a negative feedback amplifier and reduces distortions. The magnitude of the negative feedback is determined by the resistances of R502 and R501; by reducing the resistance of R501 the negative feedback is reduced to increase the gain of the audio amplifier.

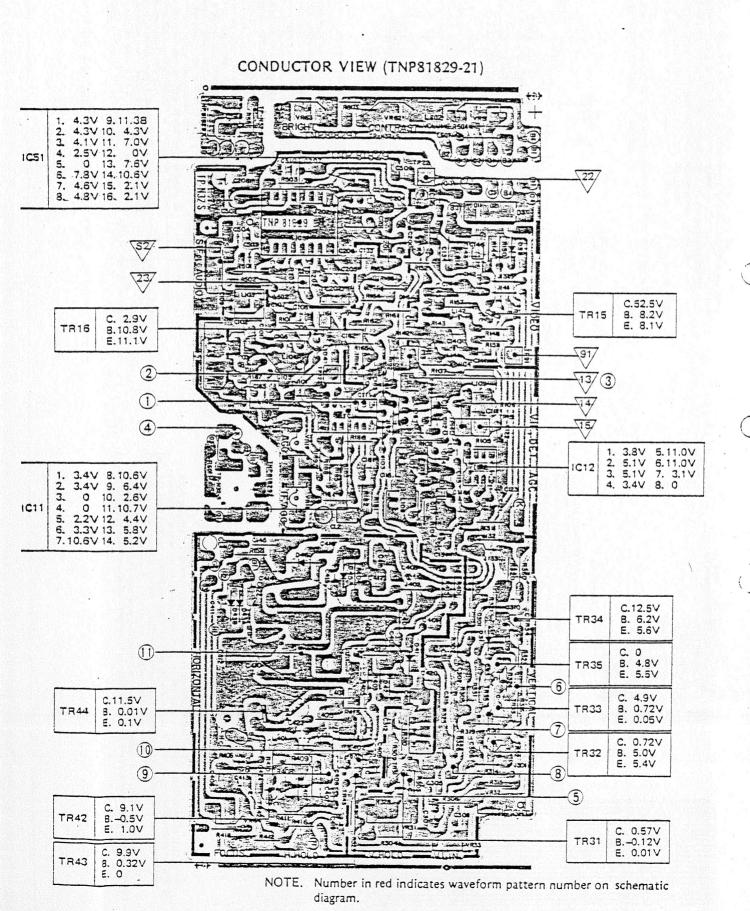


VIDEO DETECTOR & VIDEO AMPLIFIER CIRCUIT (IC 12 #PC 569C)

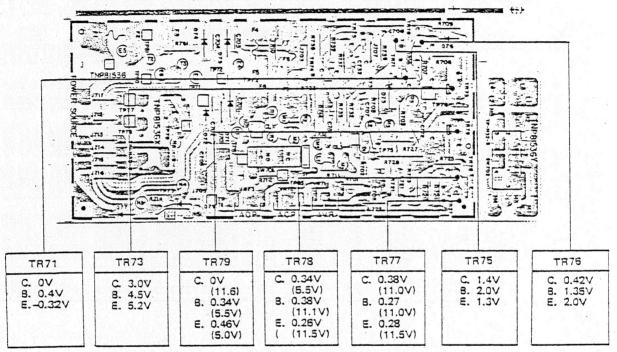
- The output from IC 11 is coupled through interstage filter to terminal pin No.7
- The interstage filter has a triple tuning construction providing an improved skirt characteristic over the conventional circuit in order to cope with disturbances by signals outside the necessary band
- In IC 12 the input is coupled through two separate paths. In one of these paths. It is directly amplified to provide inputs to the synchronous detector (the inputs Md1 and Md2, as shown in Figs. 25-A and C, being 180 degrees out of phase from each other)
- In the other path, the input is led to the carrier amplifier for limitting, and video subcarrier signals S1 and S2 (which are 180 degrees out of phase from each other as shown in Figs. 25-B and D) are derived from the resonant circuit consisting of L109 and C119 and coupled as switching signal to the synchronous detector.
- The inputs Md1 and Md2 are switched in synchronism to the subcarrier frequency, and only when the switching signal is positive the modulated wave is allowed to appear at the output of the detector (as shown in Fig. 25-E).
- The detector output thus consists of half-cycle modulated signal portions of like polarity. The half-cycle modulated wave portions are passed through the low-pass filter to demodulate the envelope of the modulated wave, i.e., modulated signal,
- The demodulated signal is amplified by the video pre-amplifier (of about 12 db) before being coupled to TR 15.





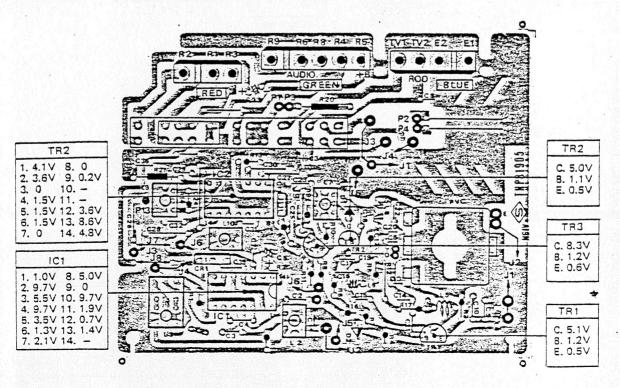


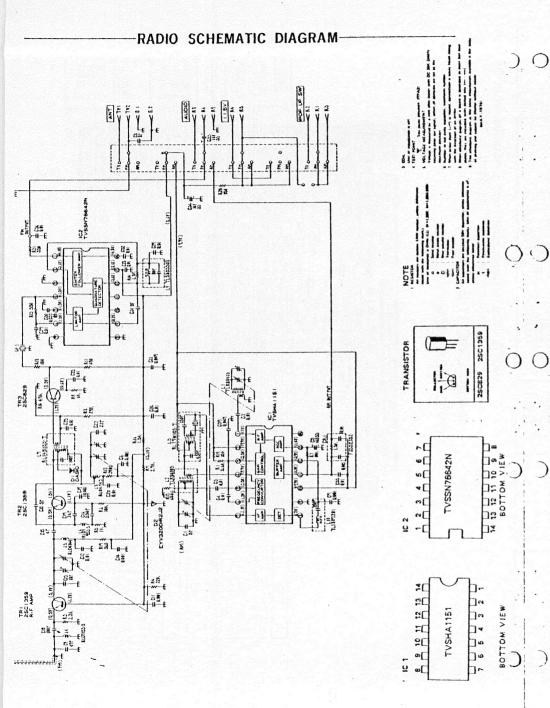
POWER SOURCE CIRCUIT BOARD CONDUCTOR VIEW (TNP81536-21S)



NOTE. The voltage in parenthesis is measured, when the power switch is set to "off" position.

-RADIO CIRCUIT BOARD CONDUCTOR VIEW (TNQ8215)





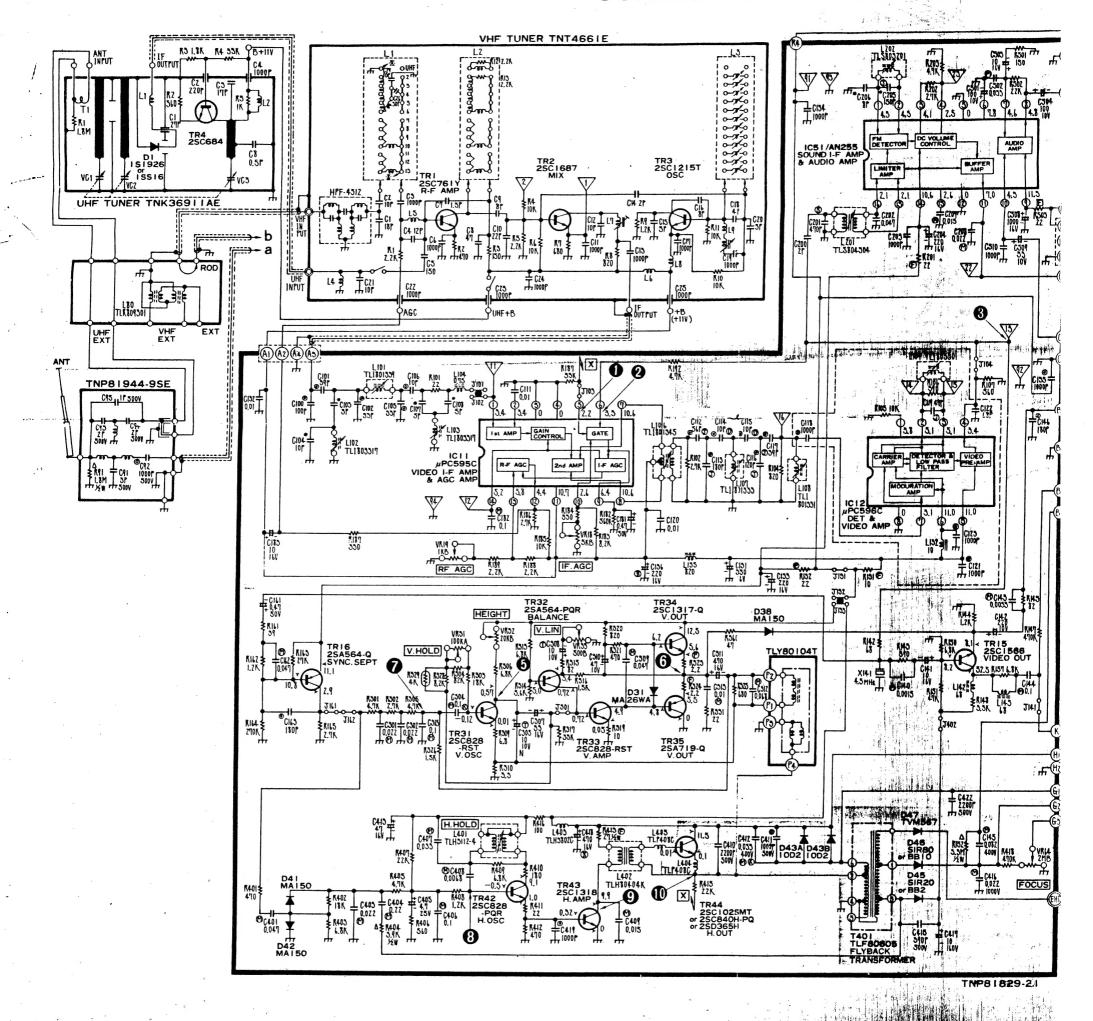
REF.	PARTS NO.	PARTS NAME & DES	CRIPTION		REF. NO.	PARTS NO.	PARTS NAME & DESCRIPTION	
	TNQ821:	RADIO BOARI	D		c	APACITORS		
	A'SSY PARTS						Cecamia 4PF +0.25PF-0.25PF	SOV
R-1	TKK800372	Dial Film Complete		5455	Cl	ECCDIHOSOCC ECCDIHIO3PF	Ceramic 4PF +0.25PF-0.25PF Ceramic 0.01UF +100%-0%	50V
R-2	TSE80305	Selector Switch			C2 C3	ECCD1H103PF	Ceramic 0.01UF +100%-0%	SOV
R-3	RDT9056A	Tuning Shaft Tuning Shaft Stopper		9.1670	C4	ECCD1H103PF	Ceramic 0.01UF +100%-0%	501
R-4 R-5	RME11D RDD310A	Poly Variable Capacitor	Drum		CS	ECEA16V33L	Electrolytic 33UF	161
		~			C6	ECKD1H102KB	Ceramic 1000PF +10%-10%	SOV
R-6 R-7	RD\$4060A RDR13	Thread Spring Guide Roller			C7	ECKD1H102KB	Ceramic 1000PF +10%-10%	50V
R-8	RDR14	Guide Roller			C8	ECKDIH080KB	Caramic 8PF +10%-10%	50V
R-9	RDR21	Guide Roller			C9	ECCD1H470KC		50V
R-10	RDY31A	Roller Stay			C10	ECCDIHIOIK	Ceramic 100PF +10%-10%	50V
R-11	RNW230A	Roller Stopper		CII	ECCD1H102KB	Ceramic 1000PF +10%-10%	50V	
R-12	RDF7A	Dial Roller			C12	ECCD1H102KB	Ceramic 1000PF +10%-10%	50V
R-13	RUS108A	Spread Spring			C13	ECCDIH1811C	Ceramic 180PF +5%-5%	50 V
R-14	RDS07-4	Rope		4	C14	ECCD1H102KB ECCD1H040C	Ceramic 1000PF +10%-10% Ceramic 4PF +0.25PF-0.25PF	501
R-15	PVC2LX20T-3M	Poly Variable Capacitor	1	- 21 3 41 5	CIS	ECCDINOACC	Ceramic 411 .0.1311 0.1311	
	ics				C16	ECKD2H331KB	Ceramic 330PF +10%-10%	500V
					C17 C18	ECCD1H240JC	Ceramic 24PF +5%-5%	501
ICI TVSHA1151						ECCD1H050CC	Ceramic 5PF +0.25PF-0.25PF	50V
C2			100	C19 C20	ECCD1H102KB ECKD1H103ZF	Ceramic 1000PF +10%-10% Ceramic 0.01UF +80%-20%	501	
-	TRANSISTORS				1	Lewbiiiiosei		
						555011101016	Caramic 24PF +5%-5%	501
TRI	2SC1359A	RF			C22	ECCD1H240JC ECCD1H103PF	Curamic 24PF +5%-5% Curamic 0.01UF +100%-0%	501
TR2 TR3	2SC1359A 2SC829B	Convertor Sound 1-F			C24	ECCDIHIO3KB	Ceramic 0.01UF +10%-10%	501
K 2	1208130	20010 1-1			C25	ECCD111103PF	Ceramic 0.01UF +100%-0%	501
	DIODES							501
	L				C26	ECCD1H473ZF ECCD1H103KB	Ceramic 0.047UF +80%-20% Ceramic 0.01UF +10%-10%	501
01	OA90	Limiter Voltage Stabilizer			C27	ECCDIHIO3KB	Ceramic 0.01UF +10%-10%	501
14	EYV320D1R2JA	Voltage Stationates			C29	ECCDIH103PF	Ceramic 0.01UF +100%-0%	501
	COILS & TRANSFO	RMERS	-		C30	ECQM05333MZ	Polyester 0.033UF +20%-20%	501
LI	TLR80113	AM Antenna Coil		100	C31	ECCD1H150IC	Ceramic 15PF +5%-5%	501
2	TLR80205	AM OSC Coll			C32	ECCD IH 103PF	Ceramic 0.01UF +100%-0%	161
.3	RLI7W105Q-T	455KHz Combination I	Filter		C33	ECEA16V33L ECEA16V33L	Electrolytic 33UF Electrolytic 33UF	161
.5	RLQY15S-5 RLD4Y44	FM Peak Coll FM R-F Coll			C35	ECKD1H103KB	Ceramic 0.01UF +10%-10%	501
						555551110705	Ceramic 0.01UF +10%-10%	50\
.6	RLQY755-5 RLI4B153-T	FM Peak Coll FM I-F Trans.			C36	ECCD1H103PF ECKD1H473ZF	Ceramic 0.01UF +10%-10% Ceramic 0.047UF +80%-20%	501
1.8	RL04Y43	FM OSC Coll				L	1	-
.9	TLS803308	FM I-F Trans		774	(R COMBINATION		
L10	TL1807201	AM I-F Trans		5-052	CRI	EXAF2532152	Combination Resistor	
	RESISTORS				CFI	TECATOR7A	10.7 Filter	
RI	ERD14VJ562	Carbon 5.6KOhm	, % +5%—5%	4w	8	RACKETS		
R2	ERD14VJ103	Carbon 10KOhm	+5%-5%	XW XW	R-16	TKK809816	Radio Complete Mounting Bracket	
R3 R4	ERD14VJ222 ERD14VJ223	Carbon 2.2KOhm Carbon 22KOhm	+5%-5%	KW	R-17	TKK809827	Slide Switch Mounting Bracket	
R5	ERD14VJ102	Carbon 1KOhm	+5%-5%	Kw	R-18	TUC80927	Shield Plate	
86	ERD14VJ103 ERD14VJ272	Carbon 10KOhm Carbon 2,7KOhm	+5%-5%	4w		NPB1829-21 M	AIN CIRCUIT BOARD	
27	ERD14VJ273	Carbon 2.7KOhm	+5%-5%	Xw	Hillian III	141 0 10 43-21 M	AIII CIRCOII BOARD	
19	ERDI4VJ102	Carbon 1KOhm	+5%-5%	14W		c		
210	ERD14VJ472	Carbon 4.7KOhm	+5%-5%	1/4 W	11.0			
	Capturia	C-4 43004	160 CW	4w	ICH	TVSMPC595C TVSMPC596C	Video 1-F Video Detector	
R11 R12	ERD14VJ471 ERD14VJ391	Carbon 4700hm Carbon 3900hm	+5%5%	XW XW	IC12 IC51	AN255	Sound 1-F	
R13	ERD14V[331	Carbon 3300hm	+5%-5%	KW	1031	L	I south I I	
R14.	ERD14V1682	Carbon 6.8KOhm	+5%-5%	Y.W	1	RANSISTORS		
R15	ERD14VJ681	Carbon 6800hm	+5%-5%	'AW	×0	l accuses		
016	600144445	Carbon LSKOhm	+5%-5%	KW	TR15	2SC1566 2SA564A	Video Output Sync. Sep.	
R16 R17	ERD14VJ152 ERD14VJ561	Carbon 1.5KOhm Carbon 560Ohm	+5%-5%	'AW	TR31	25C828A	Vert. Switching	
R18	ERD14V[15]	Carbon 1500hin	+5%-5%	%w	TR32	2SA564A	Vert. Stability	
R19	ERD14TJ151	Carbon 1500hm	+5%-5%	14W	TR33	25C828A	Vert. Drive	
R20	ERD14Tj151	Carbon 1500hm	+5%-5%	14W				
	ERD14T1331	Carbon 3300hm	+5%-5%	4w	TR34 TR35	25C1317 2SA719	Vert, Output Vert, Output	
R21					: 1477	1 43/1/12	1 Vert, Output	

REF. NO.	PARTS NO.	PARTS NAME & DESCRIPTION	REF.	PARTS NO.	PARTS NAME & DESCRIPTION
TR42	25C828A	Horiz. Osc.	C141	ECEA16V10L	Fl
TR43	,25C1318	Horiz, Drive	C142	ECEATOV2201	Electrolytic 10UF
1 144	25C1025MT	Hortz, Output	C143	ECQM05332KZ	
	DIODES		C144 C145	ECOMOSTO4MZ ECOM4823MZ	Polyester 0.1UF +10%-10% 5 Polyester 0.1UF +20%-20% 5 Polyester 0.082UF +20%-20% 4
D31 D38	MA 26WA MA 150	Vert. Blas Vert. Blanking	C146	ECCDIHISIK	Ceramic 180PF +10%-10% 5
D41	MAISO	Horiz, AFC	C161	ECEASOZR47M	Electrolytic 47UF
D42	MA150	Horiz, AFC	C162	ECOMOS473MZ	Polyester 0.047UF +20%-20% 5
D43A	TVS1002	Damper	C163	ECCDIHIBIK ECEASOZR47M	Ceramic 180PF +10%-10% 30 Electrolytic 47UF 50
D438 .	TVS1002	Damper	C182	ECOMOS TOMZ	
D46	TVSSIR20 TVSSIR80	Video Rectifier	C183	ECEA16VIOL	
047	TVM567	Focus Rectifier High Rectifier	C200	ECCD1H020CC	Ceramic 2PF +0.25PF-0.25PF 50
	COILS	1 Kecunet	C201 C202	ECQ\$1471K ECKD1H473Z	Styrol 470PF +10%-10% 100 Ceramic 0.047UF +80%-20% 50
	The second second		C203	ECKD1H102MB	1
L101 L102	TL1801339	Video 1-F Coll	C204	ECEA16V220L	
L103	TL1803317 TL1803317	Self Sound Trap	C205	ECCDIHISI	Ceramic ISOPE +5% 5% 50
L104	TLTR75-999	Adjustment Sound Trap Fixed Input Coli	C206	ECCD THOROCC	Ceramic 8PF +0.25PF-0.25PF 50
L106	TL1801345	Coupling Coll	C207	ECQM05153MZ	Polyester 0.015UF +20%-20% 50
L107	TL1801333	Coupling Coll	C208 C301	ECQM05223MZ ECQM05223MZ	Polyester 0.015UF +20%-20% 50
L108	TL1801331	Coupling Coil	C302	ECQM05223MZ	Polyester 0.022UF +20%-20% 50 Polyester 0.022UF +20%-20% 50
.131	TL1805301 TLT821-999	Video Det. Coll	C304	ECQM05104KZ	Polyester 0.1UF +20%-20% 50 +10%-10% 50
132	TLT100-999	Filter Choke Coll Filter Choke Coll	C305	ECSZ10EF10N	Electrolytic 10UF 10
142	TLT680-999	Peaking Colf	C307 C308	ECEA16V33L	Electrolytic 33UF 16
143	TLT680-999	Peaking Coil	C309	ECSZ10EF10N ECQM05473MZ	Electrolytic 10UF 10'
201	TL5804304	Sound I-F Input Coll	C310	ECEA10V47LE	Polyester 0.047UF +20%-20% 50° Electrolytic 47UF
401	TLS803201 TLH3112-4	Sound Det. Coll Horiz, Hold	C311	ECEA16V470L	Electrolytic 47UF 101 Electrolytic 470UF 161
401	TLF80805	Elubard T. J. Company	C312	FORMOTORINA	
402	TLH80404K		Ciii	ECQM05683MZ ECQM05103MZ	Polyester 0.068UF +20%-20% 501 Polyester 0.01UF +20%-20% 501
404 T	TLH3802C	Filter Choke Coll	C315	ECQM05104MZ	Polyester 0.01UF +20%-20% 50% Polyester 0.1UF +20%-20% 50%
405	TLP408C	Choke Coll	C401	ECQM05473MZ	Polyester 0.047UF +20%-20% 50%
601	TLP408C	Choke Coll	C403	ECQM05223MZ	Polyester 0.022UF +20%-20% 50\
	CAPACITORS		C404 C405	ECOMOS 224MZ ECEA 25 V4R7L	Polyester 0.022UF +20%-20% 501
100	Feebuttons		C406	ECQM05104MZ	Electrolytic 4.7UF
101	ECCDIH101K ECCDIH190K	Ceramic 100PF +10%-10% 50V	C407	ECQM053331Z	Polyester 0.10F +20%-20% 50V Polyester 0.033UF +5%-5% 50V
102	ECCD1H330K	Ceramic 39PF +10%-10% 50V Ceramic 33PF +10%-10% 50V	C408	ECOMOS682KZ	Polyester 6800PF +10%-10% 50V
103	ECCD1H030K	Ceramic 3PF +10%-10% 50V	C409	ECQM05153MZ	
104	ECCD1H100D	Ceramic 10PF +0.5PF-0.5PF 50V	C410 -	"ECKD2H222MD"	Polyester 0.015UF +20%-20% 50V Ceramic 2200PF +20%-20% 500V
105	ECCD1H330K		C411	ECKD2H102MB	Ceramic 1000PF +20%-20% 500V
106	ECCD1H100D	Ceramic 33PF +10%-10% 50V Ceramic 10PF +0.5PF-0.5PF 50V	C412	ECOM4333KZ	Polyester 0.033UF 3 +10%-10% 40V
107	ECCD1H050CC	Ceramic 10PF +0.5PF-0.5PF 50V Ceramic 5PF +0.25PF-0.25PF 50V	C413	ECEA16V47L	Electrolytic 47UF
108	ECCD1H050CC	Ceramic SPF +0.25PF-0.25PF 50V	C415	ECKD2H391KB	Ceramic 390PF +10%-10% 500V
111	ECKW1H103PF	Ceramic 0.01UF +100%-0% 50V	C416	ECQE10223MZ	Ceramic 390PF +10%-10% 500V Polyester 0.022UF +20%-20% 10V
112	ECCD1H5601	Ceramic 56PF +5% 5% 50V	C417	ECEA160V10	Electrolytic 10UF 160V
113	ECCDIHIBIT	Ceramic 56PF +5%-5% 50V Ceramic 180PF +5%-5% 50V	C418 C419	ECEA16Z470	Electrolytic 470UF 16V
14	ECCD1H100D	Ceramic 10PF +0.SPF-0.SPF 50V	C119	ECKD1H102MB	Ceramic 1000PF +20%-20% 50V
115	ECCD1H100D	Ceramic 10PF +0.5PF-0.5PF 50V	C422	ECKD2H222MD	Ceramic 2200PF +20%-20% 500V
16	ECCD1H121J	Ceramic 120PF +5%-5% 50V	C501	ECEA10V100L	Electrolytic 100UF 10V
17	ECCD1H3901	Ceramic 39PF +5%_5% 50V	C502	ECQM05333MZ	Polyester 0.033UF +20%-20% 50V
18	ECKD1H102MB	Ceramic 39PF	C503	ECEA16VIOL	Electrolytic 10UF 16V
19	ECCD H4701	Céramic 47PF +5%-5% 50V	C504	ECEA10Y100L	Electrolytic 100UF 10V
20	ECKW1H103PF	Ceramic 0.01UF +100%-0% 50V	C508	ECEA16V1000E	Flestenhale 1000UF
21	ECKD1H102MB	Ceramic 1000PF +20%-20% 50V	C509	ECEA10V33L	Electrolytic 1000UF 16V Electrolytic 33UF 10V
	Feebure		C\$10	ECKDIH102MB	Electrolytic 33UF 10V Ceramic 1000PF 50V
22 23	ECCD1H680K ECKD1H102MB	Ceramic 68PF +10%-10% 50V			30.
31	ECEA16V330L	Ceramic 1000PF +20%—20% 50V Electrolytic 330UF	RI	SISTORS	
32	ECKW1H103PF	Ceramic 0.01UF +100%-0% 50V	R101	ERD14T1220	Carbon 200hm +5%-5% %W
33	ECEA16V220L	Electrolytic 220UF 16V	R102	ERD141 272	Carbon 200hm +5%-5% WW Carbon 2.7KOhm +5%-5% WW
			R104	ERD14T1821	Carbon 8200hm +5%-5% VW
34	ECKD111102MB	Ceramic 1000PF +20%-20% 50V	R105	ERD14T1103	Carbon 10KOhm +5%-5% 1/4W
35	ECKD1H102MB	Ceramic 1000PF +20%-20% 50V	R106	ERD14Tj391	Carbon 3900hm +5%-5% %W
40	ECEA16Z2ZOE ECOM05152KZ	Electrolytic 220UF 16V 16V Polyester 1500PF +10%10% 50V	R107	ERD14TJS61	
				FR111411361 1	Carbon 5600hm +5%-5% %W

REF. NO,	PARTS NO.	PARTS	NAME & DI	ESCRIPTION	R	F.).	PARTS NO.	PARTS NAME & DESCRIPTION
R131	ERD14F1100	Carbon	100hm '+-	+5%-5%		13	ERDISTING	
R132	ERD14F1220	Carbon	220hm	+5%-5%	WW R	15	ERD12F1270	Carbon 270hm +5% 5%
R142	ERD14T1680	Carbon	680hm	+5%-5%	VW R	16	ERD14T1223 ERD14T1101	Carbon 22KOhm +5% 5% Carbon 10Ohm +5% 5%
R143	ERD14T1391	Carbon	3900hm	+5%-5%		18	ERD14T1474	Carbon 100hm +5%-5% Carbon 470KOhm +5%-5%
R144	ERD14TJ122	Carbon	1.2KOhm	+5%-5%		01	ERDIATIIS!	Carbon 1500hm +5%-5%
R145	ERD14T1820	Carbon	82Ohm	+5%-5%	WW R	02	ERD14T1223	
R147	ERDIATIS64	Carbon	560KOhm	+5%-5%		03.	ERD14F1220	Carbon 22KOhm +5% 5%
R148	ERD14T1332	Carbon	3.3KOhm	+5%-5%		04	ERD14T/182	Carbon 220hm 3, +5% 5% Carbon 1.8KOhm +5% 5%
R150	ERD14T1682	Carbon	6.8KOhm	+5%-5%	WW R		ERD14T1560	Carbon 560hm +5%-5%
RIST	ERD14TJ473	Carbon	47KOhm	+5%-5%	WW RE	01	ERDIATI152	Carbon 560hm +5%-5% Carbon 1.5K0hm +5%-5%
	Enclockate					03	ERD14T1473	Carbon 47KOhm +5%-5%
R152	ERC12GK335 ERD14T1682	Solid Carbon	3.3MOhm 6.8KOhm	+10%-10% +5%-5%	%W %W		CERAP & CONTR	tots
R161	ERD14T1390	Carbon	390hm	+5%-5%	WW XI		EFCA4R5M2	
R162	ERD14T1122	Carbon	1.2KOhm	+5%-5%		18	EVLS3AA00B53	Cerap 4.5MHZ
R163	ERD14T1273	Carbon	27KOhm	+5%-5%	WW VI	19	EVL53AA00B13	I-F AGC R-F AGC
					VI	31	EVD66A25KA15	Vert, Hold
R164	ERD14T1274	Carbon	270KOhm	+5%-5%	WW VI	32	EVLSOAA00824	Height
R165	ERD14T1272	Carbon	2.7KOhm	+5%-5%	KW			
R181	ERD14T1333	Carbon	33KOhm	+5%-5%		33	EVLSOAA00B52	Vert. Lineality
R182 R183	ERD14T1564 ERD14T1822	Carbon	560KOhm	+5%-5%	KW V	51	EVVCOAF25U14	Sound Volume
K103	L	Carbon	8.2KOhm	+5%5%	WW VE		EVVC1AF2513X	Contrast
R184	ERD14TJ331	Carbon	3300hm	+5%-5%	WW VE	03	EVVCOAF25B55	Brightness
R185	ERD14T1103	Carbon	10KOhm	+5%-5%	WW VE	04	EVTSOAA00826	Focus
R186	ERD14T1272	Carbon	2.7KOhm	+5%5%	%w		BRACKET	
R187	ERD14T1331 .	Carbon	3300hm	+5%-5%	%w		T15869070	Earphone Socket
R188	ERD14Tj222	Carbon	2.2KOhm	+5%-5%	WW		TIS25640	Picture Tube Socket
						08	TUC80519	Video I-F Sheeld Case
R189	ERD14T1222	Carbon	2.2KOhm	+5%-5%	y,w	09	TUC80520	Video I-F Sheeld Board
R192	ERD14T1472	Carbon	4.7KOhm	+5%-5%	WW		TUC80709	TR Heat Shink
R201	ERD14F 1220 ERD14F 1272	Carbon	_220hm	+5%-5%		10	TWH883440	Anode Cap with Lead
R202 R203	ERD14F1272	Carbon	2.7KOhm 4.7KOhm	+5%-5% +5%-5%	1/4 W			
K203	EKUTAFJ472	Carbon	4./KUnm	+5%-5%	14W		TAID01536 316	BOURD OF THE
R301	ERD14T1472	Carbon	4.7KOhm	+5%5%	1/4W		TNP81536-215	POWER CIRCUIT BOARD
R302	ERD14T1272	Carbon	2.2KOhm	+5%-5%	VW	T	RANSISTORS	
R303	ERD14T1183	Carbon	18KOhm	+5%-5%	WW			
R304	ERD14T/823	Carbon	82KOhm	+5%-5%	WW TR	71	25A564A	AVR
R305	ERD14T1472	Carbon	4.7KOhm	+5%-5%	WW TR		25D389	AMD
					TR		25A564A	ADP
R306 R309	ERD14T1682	Carbon	6.8KOhm	+5%-5%	WW TR		25C828A	ADP
R310	ERDIATIONS ERDIATIONS	Carbon	6.80hm 3.30hm	+5%-5%	WW TR	76	25A564A	AVR & ADP
R313	ERD14T1682	Carbon	6.8KOhm	+5%-5% +5%-5%	WW TR		2545514	
R314	ERD14T1562	Carbon	5.6KOhm	+5%-5%	WW TR		25A564A 25A564A	ACP ·
		Caroon	3.0,000	374-374	TR		25C1226A	ACP ACP
R315	ERD14T1820	Carbon	820hm	+5%-5%	1/4W	200		ACI
R316	ERD14T 152	Carbon	1.5KOhm	+5%-5%	1/4W	D	IODES	
R317	ERD14T1333	Carbon	33KOhm	+5%5%	1/4 W		1	
R319 R320	ERDIATIOO	Carbon	100hm	+5%-5%	14W D7		TV510D1	Power Rectifier
K320	ERD14T)821	Carbon	820Ohm	+5%5%	1/4W D7		TV510D1 TV510D1	Power Rectifier
R321	ERD14T1471	Carbon	4700hm	+5%-5%	14W D7		TV51001	Power Rectifier Power Rectifier
R323	ERDIAFIZEZ	Carbon	2.20hm	+5%-5%	%W 07		TVSEQA01-05T	Zener
R324	ERD14F12R2	Carbon	2.20hm	+5% 5%	1/4W			
R325	ERD14T1821	Carbon	820Ohm	+5%-5%	14W 07		MA150	AVR Start
R326	ERDIATI152	Carbon	1.5KOhm	+5%-5%	4W D7	7	TV510D1	Opposite Connection Protector
D 334	FRELEXICA		8.4KC:		07	8	TVS10D1	Opposite Connection Protector
R328	ERD14T1822	Carbon	8.2KOhm	+5%-5%	14W		484617087	
R329 R331	ERTD3ZHL4025	Thermist		15W FW	3W	c	APACITORS	
R360	ERD14T1220 ERD14T1470	Carbon Carbon	220hm 470hm	+5%5% +5%5%	14W C7		ECKDSHATSBE	Carbon 4700RF
R401	ERD14T147	Carbon	4700hm	+5%-5%	14W C7	17	ECKD2H472PE ECKD2H472PE	Carbon 4700PF +100%-0% Carbon 4700PF +100%-0%
		Caroon	17001111	. J NG J NG .	" C7		ECKD2H472PE	Carbon 4700PF +100%-0%
R402	ERD14T1183	Carbon	18KOhm	+5%5%	14W C7)4	ECKD2H472PE	Carbon 4700FF +100%-0%
R403	ERD14T1682	Carbon	6.8KOhm	+5%-5%	Y.W C7		ECET35R22005	Electrolytic 2200UF
R404	ERC12GK392	Solld	3.9KOhm	+10%-10%	7,W			
R405	ERD14T1472	Carbon	4.7KOhm	+5%-5%	14W C7		ECEA10V33L	Electrolytic 33UF
R406	ERD14TJ561	Carbon	560Ohm	+5%5%	14W C7		ECEATOV100L	Electrolytic 100UF
					C7		ECEA25V10L	Electrolytic 10UF
R407	ERD14T1223	Carbon	22KOhm	+5%-5%	14W C7	11	ECQM05472MZ	Polyester 4700PF +20%-20% Ceramic 680PF +100%-10%
R408	ERD14T/122	Carbon	1.2KOhm	+5%-5%			ECKD2H681K	Ceramic 680PF +100%-10%
R409	ERD14T1682	Carbon	6.8KOhm	+5%-5%			ECQM05103MZ	Polyester 0.01UF +20%-20%
	ERD14T]181 ERD14T]220	Carbon	1800hm 220hm	+5%-5%	74W C7	12	ECEA25V4R7	Electrolytic 4.7UF
R410		Carbon	420nm	+5%-5%	74 17			
R411	EK01411220							
	ERD1411471	Carbon	4700hm	+5%5%	%w			

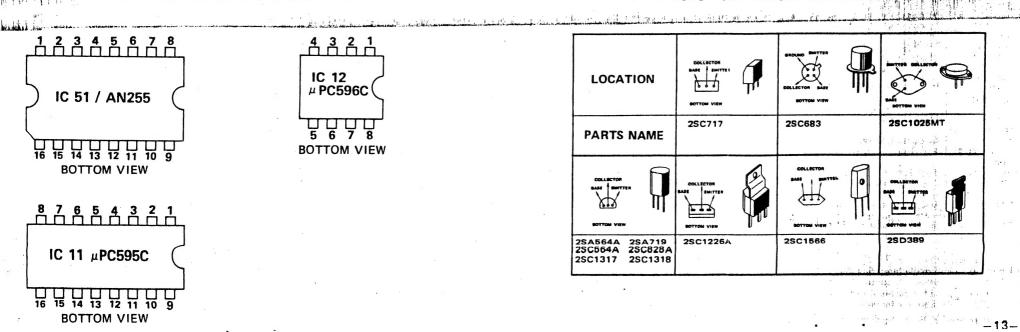
IF.).	PARTS NO.	PARTS	NAME & D	ESCRIPTION		REF. NO.	PARTS NO.	PARTS	NAME & DE	ESCRIPTION	
•	RESISTORS					R735 R736	ERD14TJ682 ERD14TJ103	Carbon	6.8KOhm	+5%-5%	14W
01:	ERD14TJ122	Campan	TOKOS	+5%-5%	- 1/4W	R737	ERD14TJ472	Carbon	10KOhm	+5%-5%	1/4W
				=+5%-5%	74W	R738		Carbon	4.7KOhm	+5%-5%	1/4W
02	ERD14TJ821				- 4W	R739	ERD14TJ123	Carbon	12KOhm	+5%-5%	1/4 W
03	ERD14TJ15T						ERD14TJ102	Carbon	1KOhm	+5%5%	1/4 W
05	ERC12GK39T			+10%-10%		100	CDC107CV10C				
07.	ERD14TJ221	Caroon	2200hm	- TO70-370	14W	RIST	ERC12ZGK185	Solid	1.8MOhm	+10%-10%	1/2 W
^-	5001471163	Carbon	15KOhm	1501 501	17:11	VR71	EVLSOAA00B23	Car - Lines			
08	ERD14TJ153		ated 0:470fi	+5%-5%			EVESOAA00B14	ACP			
11					/.W-		EVLSOAA00B53	ADP			
12_	ERD12FJ220	Carbon	6800hm		XW.			SES 🚁		25 V 4 1 4 4 4	والمتالية
14	ERD12TJ681 .	Carbon	2.2KOhm	+5%-5% +5%-5%	₩.W		XBA2F04NUT00	AC 0.4A			2.4
21	ERD14TJ222	Carbon	2.2KOnm	T370-370	- 1/4W	112	XBA2F10NU100	DCIA			~ Y -
22	5001 4T1477	Carbon	43KOhm	+5%-5%	14W	-= F13-	XBATETENU100	DC1.6A		\$ 14-16 AT THE	يمخون.
22 23	ERD14TJ433	Carbon	-22KOhm	+5%-5%	14W	2 - 20	SOCKET &	SWITCHE	S. 770 Say 7		=====
24	ERD14T)223,-		_5.6KOhm	+5%-5%		1114二	*TIS869080	AC/DC	Socket -	当时。"好多","真	t 7
25	ERD14TE	Carbon	.100hm	+5%-5%	1/4W	是[15]	TSE80606-	Pop up	Switch		
25	ERD14THT00	Carbon	10K0hm-	+5%-5%	14W	116-	TSE80704-	Power 5	witch		
20	ERD14TJ103	Caroon	FUK OHIII-	TJ 70 J 70-	74 17	В	RACKET & SCREW				
27	ERD12T1201	Carbon	2000hm	+5%-5%	1/2 W	, B	NACNET & SCREW	3			
	TRF2SKIRO		ne 10hm		2W	117	TUC80709	Heat Thi	1.		
31	ERTD2FHL332		or 3.3KOh		2W	1 '''	XTV3+8B				
	ERD14T1332	Carbon	3.3KOhm	+5%-5%	1/4W		XSB3+10S	TP79 M	lounting Scre lounting Scre		
37		Carbon	22 KOhm	+5%-5%	14W		XNG3BS	TD70 M	lounting Scre	*	
'32 '33	ERD14T1223										

SCHEMATIC DIAGRAM FOR MODE



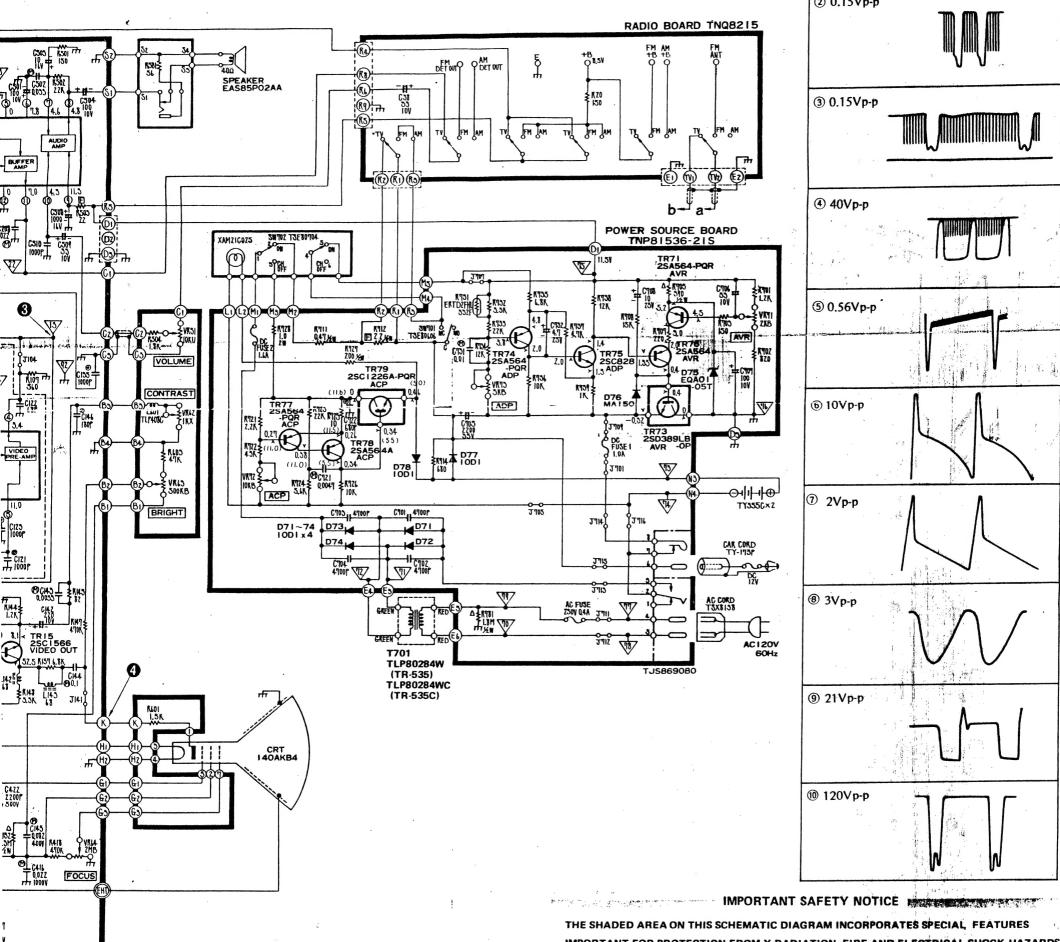
IC TERMINAL INFORMATION

TRANSISTOR BASE INFORMATION



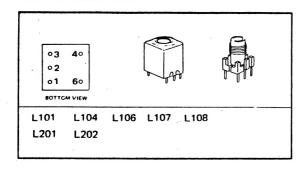
These waveforms were taken with normal signal. The peak-to-peak voltage were taken with brightness and contrast controls set for maximum position. ① 23Vp-p ② 0.15Vp-p 3 0.15Vp-p 40Vp-p ⑤ 0.56Vp-p **6** 10Vp-p ℈ⅆͰℲ℔⅃ ⑦ 2Vp-p ® 3Vp-p 9 21Vp-p 1 120Vp-p IMPORTANT SAFETY NOTICE IMPORTANT FOR PROTECTION FROM X-RADIATION, FIRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFLED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SHADED AREAS ON THE SCHEMATIC. : Metal oxide resistor + : Thermistor ich top por some All capacitors are ceramic 50V capacitor, unless otherwise noted the following marks. (S) : Polystylene capacitor The voltage in parenthesis is measured when the power switch is set to "off" position.

R MODELS TR-535 & TR-535C



TRANSFORMER TERMINATION INFORMATION

TNP81829-21



NOTE

All resistors are carbon 1/4W resistor, unless otherwise noted the following marks.

Unit of resistance is OHM (S2). (K=1,000, M=1,000,000)

Δ : Solid resistor

☐ : Wire wound resistor →WV+ : Fuse resistor

Unit of capacitance is µF, unless otherwise noted.

M : Polyester capacitor

+ | : Electrolytic capacitor

3. COIL

Unit of inductance is μH . 4. TEST POINT

2. CAPACITOR

 $\overline{\mathbb{V}}$: Test point position.

5. VOLTAGE MEASUREMENT

Voltage is measured by a volt ohm meter with DC 20K OHM/V receiving normal signal, when all controls are set to the maximum position

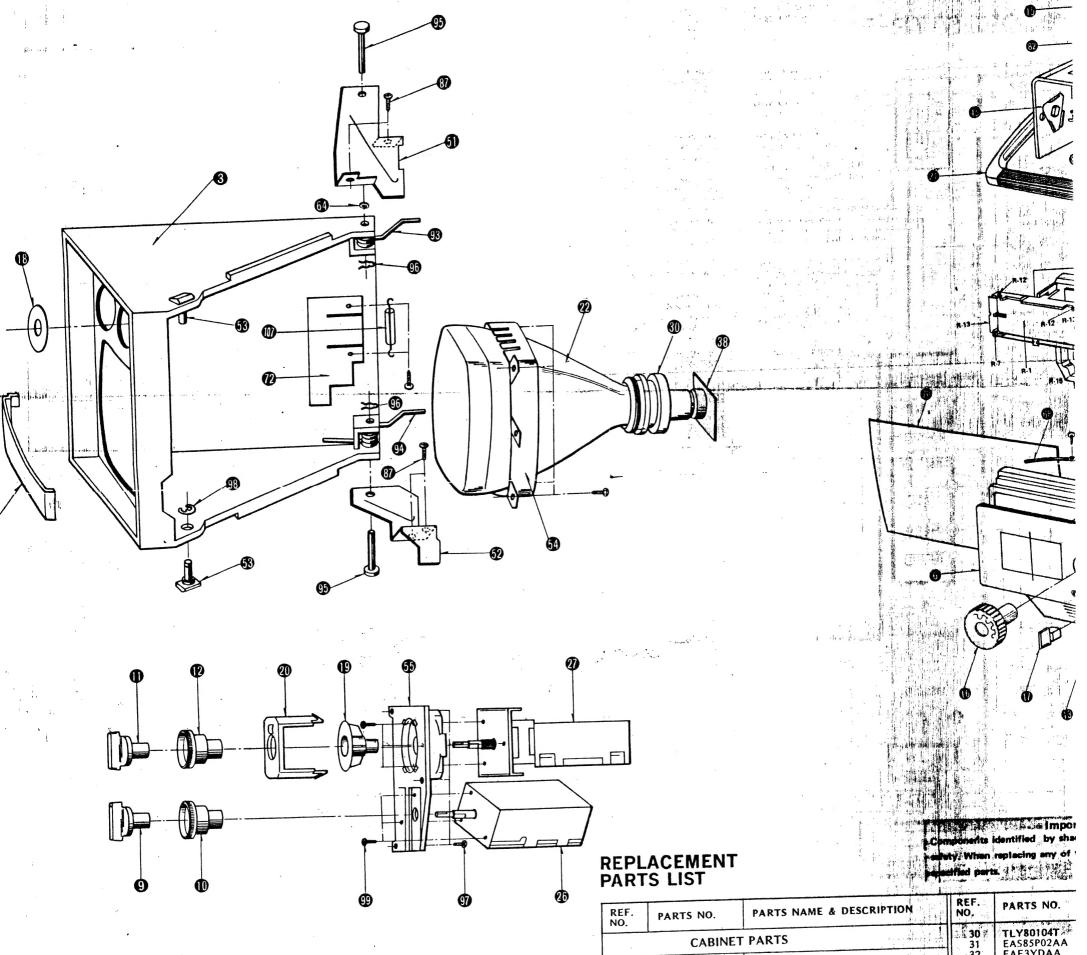
6. Number in red circle indicates waveform number

7. When arrow mark (/) is found, connection is easily found along with the direction of an arrow.

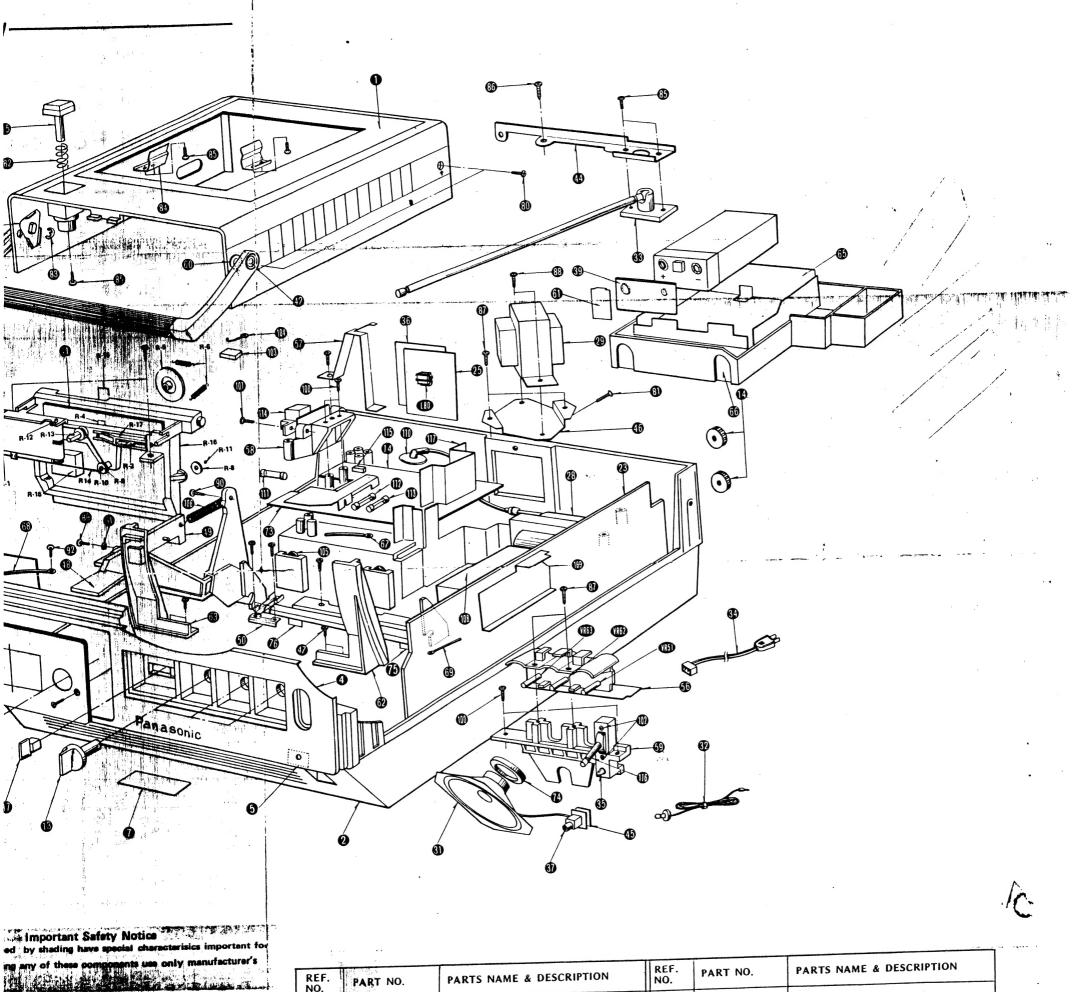
8. When schematic diagram of a board is described in more than two places, they are encircled with dotted line (---).

9. This schematic diagram is the latest at the time of printing and subject to change without notice.
[May 1975]





	F.	PARTS NO.	PARTS NAME & DESCRIPTION	REF.	PARTS NO.
NO	Э.	CABINET	PARTS	30 *	TLY80104T
		CABINET	5 8 8	31 32	EAS85P02AA EAE3YDAA
	1 2	TKY802301 TKY802101-1H	Upper Cabinet Under Cabinet Complete	33 734	TSA141-15 TSX8138
	2	(TR-535) TKY802101-2H (TR-535C)	Under Cabinet Complete	35 36 37	XAM21C025 TJB802425 TJS869070
	3 4	TKY802201-1H TKP8052751	Escutcheon Complete Aluminum Panel	58	T1525640
	5 6 7	TKK39317 TKP8011591-1 TBM82628-1	Lamp Indicator Plate Radio Transparent Plate Model Plate	L80 39	TLR809316 TJB80906-1 TPC803271
ad the state	17.11	(TR-535)	Model Plate Marian		(TR-535) TPC803321 (TR-535C)
		(TR-535C)		ļa	XAPD01535
	8	TKG809638	Front Glass VHF Channel Knob		TPE84023
	9 10	TBX80765 TBX80758-1	VHF Channel Knob VHF Fine Tuning	1	TQB83494
	11	TBX80759	UHF Channel Knob		(TR-535)
-	12	TBX80757-1	UHF Fine Tuning		TQB83508 (TR-535C)
				ib-	TOB82494
	13	TBX80581-1	Small Knob Vert./Horiz, Knob	844	(TR-535)
1	14 15	TBX80583-1 TKK809810	Pon-un Botton	15	
	16	TBX80582	Radio Tuning Dial Knob		TQB82508 (TR-535C)
	17	TBX80557-3	Radio-TV Selector Knob		TOB82500
	18	TKP8010961	VHF Indicator Plate UHF Indicator Plate		TQD8112069
	19	TKK800357-4 TKK800356	UHF Indicator Transparent Plate		(TR-535)
	20 21	TKK800336	Handle Complete	ll .	TQD8111266
. 65	22	140AKB4	Picture Tube		(TR-535C
	23	TNP81829-21	Main Circuit Board Complete		TQB32894P
	24 25	TNP81536-21	Power Circuit Board Complete U/V Signal Separator Circuit	41	TNQ8215
	23	1,	Board Complete	1	ACKETS
	26	TNT4661E	VHF Tuner	BR	ACREIS
	27	TNK36911AE	UHF Tuner	11 40	TKK809240
-	28	TLF80805	Flyback Transformer Power Transformer	42	TKZ800925Z
1.	29	TLP80284W (TR-535)	TOWER ITALISTOTION	44	TUW80977Z
			Power Transformer	45	TMK81252
- 1	29	TLP80284WC	LONGI HAIDIOITIO	11	



TS NO.	PARTS NAME & DESCRIPTION
80104T 24	Deflection Yoke
B5P02AA	Speaker
3YDAA	Earphone
141-15	Rod Antenna
B138	Power Cord
121C025	Pilot I emo
302425	Antenna Terminal Board Complete
69070	Earphone Socket & Janes Co.
!5640	Picture Tube Socket
809316	Balun Coil
30906-1	Battery Terminal Complete
803271	Outer Carton
TR-535)	
803321	Outer Carton
TR-535C)	
'D01535	Filler Complete
84023	Set Cover and the
02404	Fan Bag

110 33301	4.5
D01535 84023 83494 TR-535)	Filler Complete Set Cover Fan Bag
183508 TR-535C)	Fan Bag Instruction Book
TR-535)	
382508 TR-535C) 382500	Instruction Book
08112069-8 (TR-535) 08111266	Fact Tag
(TR-535C)	a control of the control of
332894P	Battery Instruction Book
⊋821.€	FM/AM Radio Complete
rs	Table 1

Handle Mounting Pin Handle Mounting Bracket

K809240 Z800925Z

REF.	PART NO.	PARTS NAME & DESCRIPTION	REF. NO.	PART NO.	PARTS NAME & DESCRIPTION
	TI BINGS			and the second of the second o	Antenna,Pop-up Button,Pop-up Block
	district to the second	Power Transformer Mounting Bracket	85	XTB4+12A	Stopper Mounting Screw
46	TUX80284C TKX804101	Lock Shaft		VCD2186	Antenna Terminal Bracket
47 48	TKX804201	Lock Shaft Arm	86	XSB3+8S	Mounting Screw
	TKX804201	Lock Shaft Arm Mounting Bracket			
49 50	TKZ809916	Lock Shaft Holder	87	XTB4+15A	Power Circuit Board, Volume Block
	TKZ809914C	Pop up Block Mounting Bracket, (A)	0,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Speaker Pop-up Block Mounting Screw
51	TKZ809915C	Pop-up Block Mounting Bracket. (B)	88	XTB4+8B	Power Transformer Mounting Screw
52 53	TKX804901	Lock Pin	89	XTB4+12A	Lock Shaft Arm Mounting Screw
	TKW80961-4	Picture Tube Band	90	XTV3+6A	Lock Shaft Spring Mounting Screw
54	(TR-535)		91	XWG4	Lock Shaft Arm Mounting Washer
54	TUW80961-4	Picture Tube Band			
34	(TR-535C)		92	XTB4±15A	Radio Mounting Screw
55	TKX803701	Tuner Mounting Bracket	93	TES8217	Pop-up Spring (Right)
56	TKX804601	Volume Mounting Bracket	94	TES8220	Pop-up Spring (Left)
57	TES8123	Pon-un Switch Spring	95	TEL8116	Pop-up Block Mounting Shaft
58	TKX804401	Power Cord Socket Holder	96	TES8127	Pop-up Block Holding Pin
59	TKX804501	Speaker Stopper	97	XTB4+15A	Tuner Block Mounting Screw
60	TKK809239	Handle Bushing	98	TES8126	E-Ring
60	18803233		99	XTV3+10B	Tuner Mounting Screw
61	TIC80310	Battery Terminal Plate	100	XTB3+12A	Speaker, Pop-up Block Mounting Screw
62	TKX803901	niature Tube Variare Holder (A)	100		
63	TKX804001	Picture Tube Variare Holder (B)	101	XTB4+12A	Power Cord Socet Mounting Screw
64	TKX804801	Shaft Cover	102	XSB3+65	Power Switch Mounting Screw
04	1 KAGG IGG I		103	T1T8504M	4P Coupler
65	TMK81941-1	Battery Spacer	100	TIT487	1P Coupler
66	TMK81253	Battery Lead Mounting Bracket	1	TJT885	1P Chip
00	111111111111111111111111111111111111111			1,,	
67	TMK81936	Power Circuit Board Lead		TIT8503M	3P Coupler
01	TWROTES	Mounting Bracket		T1T8505M	5P Coupler
60	TMK81937	Radio Lead Mounting Bracket		T1T8707M	Coupler Terminal (Slender)
68	TMK81337		104	T1T8708M	Coupler Terminal (Thick)
69	TMK81939	Main Circuit Board Lead Mounting Bracket	104	1,,	1
70	TMK81934	Picture Tube Barrier	105	TES8218	Battery Terminal Spring
72	TMK82142-1	Escutcheon Lead Spacer	106	TES8216	Lock Shaft Spring
73	TMK81940	Power Circuit Board Spacer	107	TES8304	Lead Wire Mounting Spring
/3	IMIKOTOTO			RESISTOR	
74	TMM81556	Speaker Mounting Rubber		KESISTON	
	TMM81562	Cushion Rubber (A)	R91	ERC12ZGK185	Ceramic 3PF +0.25PF-0.25PF 500V
75	TMM81563	Cushion Rubber (B)	K91		
/ /			11	CAPACITORS	
				1	colid 1 8MOhm +10%-10% 1/2W
1 .	SCREWS, WASHERS	& SPR ING	C91	ECCD2H030C	Solid 1.8MOhm +10%-10% 5W
1 .	1				1000BE +20%-20% 500V
80	XTB4+15AFC	Upper Cabinet Mounting Screw	C92	ECCD2H102MB	Ceramic 1000FF 120% 20%
81	XSS3+20FNKS	Antenna Terminal Mounting Science	C93	ECCD2H020C	Ceramic 2PF TU.23FT TU.23FT
82	TES8215	Pop-up Botton Spring	C94	ECCD2H020C	Ceramic 2PF TU.2311 U.23
83	TES8130	Handle "U" Ring	C05	FCCD2H010C	Ceramic 1PF +0-25PF-0.25PF 500V